COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Valley Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Crown Cork and Seal Company USA, Inc.
Winchester, Frederick County, Virginia
Permit No. VRO80237
Effective Date: September 7, 2004
Expiration Date: September 6, 2009

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Crown Cork and Seal Company USA, Inc. has applied for a renewal of the Title V Operating Permit aluminum beverage can end manufacturing facility in Winchester, Frederick County, Virginia. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Deputy Regional Director:_____ Date:_____

FACILITY INFORMATION

Permittee
Crown Cork and Seal Company USA, Inc.
One Crown Way
Philadelphia, PA 19154

Facility
Crown Cork and Seal Company USA, Inc.
1461 Martinsburg Pike
Winchester, VA 22603

NET Identification Number: 51-069-0002

SOURCE DESCRIPTION

SIC Code: 3411 – Manufacture aluminum can ends

Crown Cork and Seal Company USA, Inc. manufactures aluminum can ends at the Winchester facility. There are three can end lines in the plant. Precoated coils of aluminum stock are fed into a shell press on each line. The shell press punches out aluminum can ends which are then roll coated with end seal compound. The compound assures a hermetic seal when the can end is joined to the can. After coating the ends go to conversion presses which produces rivets, a score line, and logo embossing. The conversion press also forms the tab. Volatile organic compound emissions (VOC) result from evaporation of solvent in the end seal compound and tab lubricant, and organic cleaning solvents.

The facility is a Title V major source of volatile organic compounds. This source is located in a recently designated nonattainment area for ozone which is under an Early Action Compact. The facility is located in an attainment area for all other pollutants, and is a PSD major source. The facility was previously permitted under a minor New Source Review permit issued on February 19, 1999. The February 19, 1999 permit superseded a permit issued on January 28, 1992, and amended on January 15, 1993, and November 13, 1993. The February 19, 1999 was superseded on December 27, 2001. Specifically, the permit was amended to remove applicable requirements for two 206 can end lines (Ref. 19 and 20) and a 401 can end line (Ref. 4). These units have been removed from the facility.

CHANGES TO EXISTING TITLE V PERMIT

The following is a revised list of Insignificant Activities since the issuance of the Title V permit minor modification on February 7, 2002:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
6	Natural gas-fired space heaters (3)	9 VAC 5-80-720 C		1.25 MMBtu/hr
7	Natural gas-fired space heaters (4)	9 VAC 5-80-720 C		2.0 MMBtu/hr
8	Natural gas-fired space heaters (1)	9 VAC 5-80-720 C		2.5 MMBtu/hr
9	Natural gas-fired space heaters (2)	9 VAC 5-80-720 C		0.2 MMBtu/hr
10	Natural gas-fired space heater	9 VAC 5-80-720 C		0.5 MMBtu/hr
11	Emergency diesel generator	9 VAC 5-80-720 C		125 HP
14	Isopar C holding tank	9 VAC 5-80-720 B	VOC	120 gallons
15	End sealing compound storage tanks (2)	9 VAC 5-80-720 B	VOC	6,000 gallons each
16	Waste cleaning solvent tank	9 VAC 5-80-720 B	VOC	2,000 gallons
17	Tab lube storage tank	9 VAC 5-80-720 B	VOC	6,000 gallons
18	Diesel storage tank	9 VAC 5-80-720 B	VOC	800 gallons
21	Diesel storage tank	9 VAC 5-80-720 B	VOC	10,000 gallons
22	Solvent storage tank – Isopar C	9 VAC 5-80-720 B	VOC	8,000 gallons
23	Storage tanks (2)	9 VAC 5-80-720 B	VOC	8,000 gallons
24	Coating storage tank	9 VAC 5-80-720 B	VOC	10,000 gallons
25	Propane storage tanks (2)	9 VAC 5-80-720 B	VOC	30,000 gallons 1,000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Additionally, the State Air Pollution Control Board took final action and approved the establishment of emission control areas and Reasonably Available Control Technology (RACT) requirements for Winchester and Frederick County. These changes to the State Regulations for the Control and Abatement of Air Pollution, which became effective March 24, 2004, require presumptive RACT for selected volatile organic compound (VOC) sources. As a result, the facility is subject to the requirements of 9 VAC 5 Chapter 40, Article 29 (Emissions Standards for Can Coating Application Systems (Rule 4-29)). Specifically, the facility is subject to the can end coating portions of Rule 4-29. The facility is also subject to 9 VAC 5 Chapter 40, Article 24 (Emission Standards For Solvent Metal Cleaning Operations Using Non-Halogenated Solvents (Rule 4-24)) because it operates several cold cleaning machines (parts washers).

A visible emission limit condition was added to the permit for all process equipment because the requirements in 9 VAC 5-40-80 and 9 VAC 5-50-80 have been determined to be applicable.

Lastly, the general conditions in the permit have been updated to reflect changes to boilerplate language.

COMPLIANCE STATUS

The beverage can end manufacturing facility is inspected once a year. The facility was last inspected on October 9, 2003, and was determined to be in compliance.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Table I. Significant Emission Units.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process Equipment - Can End Lines							
1	11 Roof Fans (A11)	202 Diameter (Optime) End Line 1 Flow Coating (1995)	450,000 ends/hr	---	---	---	12/27/01
2		202 Diameter (Optime) End Line 2 Flow Coating (1995)	450,000 ends/hr	---	---	---	12/27/01
3		202 Diameter (Optime) End Line 3 Flow Coating (1994)	450,000 ends/hr	---	---	---	12/27/01
5		Miscellaneous Organic Solvent Cleaning	---	---	---	---	---
Process Equipment – Cold Cleaning Machines							
12	11 Roof Fans (A11)	150 Parts Washer	110 gallons	---	---	---	---
13		Machine Shop Parts Washer	7 gallons	---	---	---	---
26		Millwright Shop Parts Washer	20 gallons	---	---	---	---
27		Compound/Drum Room Parts Washer	7 gallons	---	---	---	---

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement

EMISSIONS INVENTORY

A copy of the 2002 annual emission inventory is attached as Attachment A. Emissions are summarized in the following tables.

Table II. 2002 Actual Criteria Pollutant Emissions for the Beverage Can End Manufacturing Facility.

	Criteria Pollutant Emissions (tons/yr)				
	VOC	CO	SO_2	PM-10	NO_x
Can End Lines (Ref. 1-3)	187.6	---	---	---	---
Miscellaneous Organic Cleaning (Ref. 5)	41.4	---	---	---	---
Total	**229.0**	---	---	---	---

Table III. 2002 Actual Hazardous Air Pollutant Emissions for the Beverage Can End Manufacturing Facility.

Pollutant	Hazardous Air Pollutant Emissions (tons/yr)
None	---

EMISSION UNIT APPLICABLE REQUIREMENTS

Process Equipment Requirements (Can End Lines 1, 2 and 3)

Limitations:

The following limitations are state BACT and/or other applicable requirements from the state minor NSR permit dated December 27, 2001. Please note that the condition numbers are from the 2001 permit; a copy of the permit is enclosed as Attachment B.

Condition 3: Volatile organic compound emissions (VOC) from lines 1, 2 and 3 end seal compound application shall not exceed 3.1 pounds per gallon of coating excluding water, as applied.

Condition 4: VOC emissions from lines 1, 2 and 3 tab seal use shall not exceed 5.6 pounds per gallon of coating excluding water, as applied.

Condition 5: VOC emissions from the operation of the three (3) Optime 202 diameter end lines (lines 1, 2, and 3) shall not exceed 337 tons per year, calculated monthly as the sum of each consecutive 12-month period.

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5 Chapter 40, Article 29, Emission Standards for Can Coating Application Systems
9 VAC 5-40-80, Existing Source Standard for Visible Emissions
9 VAC 5-50-80, New Source Standard for Visible Emissions

The following conditions in the Title V permit were established pursuant to these Codes:

Condition III.A.4: The permittee shall take reasonable precautions to minimize volatile organic compound emissions from cleaning or purging operations.

Condition III.A.5: VOC emissions from the operation of the three (3) 202 diameter end lines (lines 1, 2, and 3) shall be controlled by the use of water-based or high-solids coatings.

Condition III.A.6: Visible emissions from each of the three (3) 202 diameter end lines (lines 1, 2, and 3) stack shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

Monitoring and Recordkeeping:

The monitoring and recordkeeping requirements in Condition 6 of the NSR permit have been modified to meet Part 70 requirements by requiring EPA Method 24 results or VOC data sheets, rather than MSDS sheets, to demonstrate compliance with VOC emission limits. Monitoring and recordkeeping requirements are shown below.

- Monthly records of the amount of each end seal coating and tab lube used in gallons on each 202 and 206 end line to show compliance with annual VOC emission limits.

- To show compliance with the end seal and tab lube VOC content limits and annual VOC emission limits, EPA Method 24, 40 CFR Part 60, Appendix A results or VOC data sheet per 40 CFR Part 63, Subpart II, Appendix A, for each end seal compound is required. The condition language was modified from the NSR permit which allowed

a MSDS sheet. Method 24 results or a VOC data sheet contain all the information required to demonstrate compliance. A VOC data sheet format is attached.

- Monthly calculations of monthly and rolling 12-month VOC emissions to show compliance with annual VOC emission limits. Calculations shall assume that the amount of end seal and tab lube VOC used equals the amount of VOC emitted.

The monitoring requirement and recordkeeping requirement of Condition 10 of the minor NSR permit, to develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, has been included in the Title V permit.

The visible emission limits in 9 VAC 5-40-80 and 9 VAC 5-50-80 are applicable. However, the can end lines are not sources of visible emissions. The organic compounds in the end seal and tab lube, and the end line application process do not result in visible emissions. Therefore, no monitoring is required for Condition III.A. 6 of the Title V permit.

Testing

A table of test methods has been included in the permit if future testing is required. The DEQ and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

No specific reporting has been included in the permit for the can end lines.

Streamlined Requirements:

9 VAC 5-40-80, Existing Source Standard for Visible Emissions, as specified by Rule 4-29 has been streamlined because the three (3) 202 diameter end lines (lines 1, 2, and 3) are also subject to the more stringent visible emissions requirements under 9 VAC 5-50-80.

9 VAC 5-40-4030 D, Standard for Volatile Organic Compounds (end sealing compound coating) has been streamlined because the existing permit limit of 3.1 pounds per gallon is more stringent than the Rule 4-29 limit of 3.7 pounds per gallon.

Process Equipment Requirements (Cold Cleaning Machines)

Limitations:

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5 Chapter 40, Article 24, Emission Standards For Solvent Metal Cleaning Operations Using Non-Halogenated Solvents
9 VAC 5-40-80, Existing Source Standard for Visible Emissions
9 VAC 5-50-80, New Source Standard for Visible Emissions

The following conditions in the Title V permit were established pursuant to these Codes:

Condition IV.A.1: Each cold cleaning machine shall be equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.

Condition IV.A.2: Each cold cleaning machine shall be equipped with control methods.

Condition IV.A.3: Visible emissions from each cold cleaning machine shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

Monitoring and Recordkeeping:

Monitoring and recordkeeping requirements necessary to demonstrate compliance with Conditions IV.A1 and IV.A.2 are shown below.

- The following procedures shall be followed when operating each cold cleaning machine:

  - Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate into the atmosphere. Store waste solvent only in closed containers.

  - The degreaser cover should be closed whenever not handling parts in the cleaner. Cleaned parts should drain for at least 15 seconds or until dripping ceases.

  - Disposal of waste solvent from solvent metal cleaning operations should be by reclamation or incineration.

- The permittee shall monitor and maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit, including:

- Annual throughput of each solvent used in the cold cleaning machines (in gallons) calculated as the sum of each consecutive 12-month period.

- Annual quantity of waste solvent recovered from the cold cleaning machines (in gallons) calculated as the sum of each consecutive 12-month period.

- Records of disposal methods used for waste solvent from solvent metal cleaning operations.

The visible emission limits in Condition IV.A.3, which are based on the applicable requirements contained in 9 VAC 5-40-80 and 9 VAC 5-50-80 are applicable. However, the cold cleaning machines are not sources of visible emissions. The organic compounds used in the cold cleaning machines in combination with the fact that it is a cold cleaning process do not result in visible emissions. Therefore, no monitoring is required for Condition IV.A.3 of the Title V permit.

Testing

A table of test methods has been included in the permit if future testing is required. The DEQ and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the cold cleaning machines.

Streamlined Requirements

9 VAC 5-40-80 (Existing Source Standard for Visible Emissions) has been streamlined. 9 VAC 5-50-80 (New Source Standard for Visible Emissions) was determined to be applicable to can end lines because documentation of construction dates for the individual emission units were unavailable.

No other specific streamlined requirements have been included in the permit for the cold cleaning machines.

Facility Wide Conditions

Monitoring and Recordkeeping

The permittee will monitor and record annual organic cleaning solvent usage and the VOC content of the organic cleaning solvent for emission inventory and fee purposes. There is no need for monthly compilation of the information. VOC content records may consist of Method

24 results, VOC data sheet, or MSDS sheet.

Testing

A table of test methods has been included in the permit if future testing is required. The DEQ and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the facility-wide section of the Title V permit.

Streamlined Requirements

No specific streamlined requirements have been included in the permit for the facility-wide section of the Title V permit.

Compliance Assurance Monitoring (CAM) Plan Applicability

The CAM plan does not apply to any of the emission units at the beverage can end manufacturing facility. CAM applies to each emissions unit meeting all of the following criteria at a major source required to obtain a Title V permit:

- emits or has the potential to emit (in the absence of add-on control devices) quantities of one or more regulated air pollutants that exceed major source thresholds;
- is subject to one or more emission limitations for the regulated air pollutant(s) for which it is major before control; and

- uses a control device to achieve compliance with one or more of these emission limitations.

Can end lines 1, 2 and 3 exceed major source thresholds. However, there are no control devices used to achieve compliance with the applicable emissions limitations. Therefore, CAM does not apply.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes that have specific requirements only enforceable by the State have been identified as applicable by the applicant:

9 VAC 5-50-140, Odorous Emissions
9 VAC 5-60-320, Toxic Pollutants

These requirements have been streamlined from the permit because they are not specific and the exclusion of these general state requirements from a Title V permit do not diminish the enforcement authority of DEQ.

FUTURE APPLICABLE REQUIREMENTS

There are no future applicable requirements that are expected for this facility.

INAPPLICABLE REQUIREMENTS

The applicant identified the New Source Performance Standard (NSPS) Requirements for Beverage Can Coating in 40 CFR Part 60, Subpart WW, and 9 VAC 5-40-410, as not currently applicable. The NSPS requirements do not include limitations or requirements for can end sealing and tab lube.

The Department has determined that the following requirements are not applicable:

On August 14, 2003, the Environmental Protection Agency (EPA) issued 40 CFR 63 Subpart KKKK - Metal Can Surface Coating to reduce toxic air pollutant emissions from metal can surface coating operations. This MACT applies to new, reconstructed and existing facilities that are a "major source" of air toxics or are part of a facility that is a "major source" of air toxics. A "major source" emits 10 tons per year or more of a single toxic air pollutant listed in the Clean Air Act or 25 tons per year or more of a combination of those pollutants. Since the facility is not classified as a major HAP source, the MACT does not apply.

NSPS requirements for Organic Liquid Storage in 40 CFR Part 60 Subpart Kb and 9 VAC 5-40-410, are not currently applicable. The NSPS is applicable to tanks with storage capacities greater than 40 cubic meters or 10,568 gallons. Other than propane storage which is not subject to the NSPS, the largest liquid storage tank at the facility has a capacity of 10,000 gallons.

The MACT standard for halogenated solvent cleaning in 40 CFR Part 63 Subpart T, and 9 VAC 5 Chapter 50, are not currently applicable. The facility does not use any halogenated cleaning solvents in its cold cleaning machines.

Inapplicable requirements identified by the Department have not been listed as inapplicable requirements in the permit shield table of inapplicable requirements.

COMPLIANCE PLAN

Crown Cork and Seal Company USA, Inc. is currently in compliance with all applicable requirements. No compliance plan was included in the application or in the permit.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Table IV. Insignificant Emission Units.

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
6	Natural gas-fired space heaters (3)	9 VAC 5-80-720 C		1.25 MMBtu/hr
7	Natural gas-fired space heaters (4)	9 VAC 5-80-720 C		2.0 MMBtu/hr
8	Natural gas-fired space heaters (1)	9 VAC 5-80-720 C		2.5 MMBtu/hr
9	Natural gas-fired space heaters (2)	9 VAC 5-80-720 C		0.2 MMBtu/hr
10	Natural gas-fired space heater	9 VAC 5-80-720 C		0.5 MMBtu/hr
11	Emergency diesel generator	9 VAC 5-80-720 C		125 HP
14	Isopar C holding tank	9 VAC 5-80-720 B	VOC	120 gallons
15	End sealing compound storage tanks (2)	9 VAC 5-80-720 B	VOC	6,000 gallons each
16	Waste cleaning solvent tank	9 VAC 5-80-720 B	VOC	2,000 gallons
17	Tab lube storage tank	9 VAC 5-80-720 B	VOC	6,000 gallons
18	Diesel storage tank	9 VAC 5-80-720 B	VOC	800 gallons
21	Diesel storage tank	9 VAC 5-80-720 B	VOC	10,000 gallons
22	Solvent storage tank – Isopar C	9 VAC 5-80-720 B	VOC	8,000 gallons
23	Storage tanks (2)	9 VAC 5-80-720 B	VOC	8,000 gallons
24	Coating storage tank	9 VAC 5-80-720 B	VOC	10,000 gallons
25	Propane storage tanks (2)	9 VAC 5-80-720 B	VOC	30,000 gallons 1,000 gallons

[1]The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

Crown Cork and Seal Company USA, Inc. did not submit a request for confidentiality. Therefore, all portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in the Winchester Star newspaper, Winchester, Virginia, on July 20, 2004.

Public comments were accepted from July 20, 2004, to August 19, 2004. No comments were received from the public or the affected states (West Virginia, Pennsylvania, and Maryland) regarding the draft permit. EPA conducted a concurrent review and comments were accepted from July 20, 2004 through September 3, 2004. No comments were received from EPA.

ATTACHMENT A

2002 Annual Emissions Update

ATTACHMENT B

Minor NSR Permit
(December 27, 2001)

ATTACHMENT C

VOC Data Sheet